

November 27, 2000

- (a) contacting a biological sample from said subject with an antibody specific for said neurotrophin receptor,
- (b) testing for the presence of said antibody in complex with said neurotrophin receptor, and
- (c) diagnosing said pathological condition.

7. (New) The method of Claim 6, wherein said antibody further comprises a detectable moiety.

8. (New) The method of Claim 6, wherein said method comprises an assay method selected from the group consisting of competitive binding assays, direct sandwich assays, indirect sandwich assays, and immunoprecipitation assays.

9. (New) The method of claim 6, wherein said pathological condition is selected from the group consisting of inflammatory pain, pancreas disorders, kidney disorders, lung disorders, cardiovascular disorders, tumors, cancers, aberrant neuron sprouting, neurodegenerative diseases and psychiatric disorders.

10. (New) The method of Claim 6, wherein said sample is tissue.

11. (New) The method of Claim 10, wherein said tissue is cancer tissue.

12. (New) The method of Claim 6, wherein said subject is a human.

13. (New) A method for the diagnosis of a pathological condition characterized by the over-expression or under-expression of a neurotrophin receptor selected from human TrkA, human TrkB and human TrkC in a subject, comprising

- (a) contacting a biological sample from said subject with a detectably-labeled nucleic acid capable of hybridizing to at least a portion of a transcript from said neurotrophin receptor,

- (b) testing for the presence of said detectably-labeled nucleic acid in complex with said neurotrophin receptor transcript, and
- (c) diagnosing said pathological condition.

14. (New) The method of Claim 13, wherein said method comprises an assay method selected from the group consisting of northern blotting assays and *in situ* hybridization assays.

15. (New) A method for the diagnosis of a pathological condition characterized by the over-expression or under-expression of a neurotrophin receptor selected from human TrkA, human TrkB and human TrkC in a subject, comprising

- (a) contacting a biological sample from said subject with at least two nucleic acids capable of hybridizing to different portions of said neurotrophin receptor gene,
- (b) amplifying a nucleic acid product,
- (c) testing for the presence of said amplified nucleic acid product, and
- (d) diagnosing said pathological condition.

16. (New) The method of Claim 15, wherein said method comprises a PCR assay.

17. (New) A method for the diagnosis of a pathological condition characterized by the over-expression or under-expression of a neurotrophin in a subject, comprising

- (a) contacting a biological sample from said subject with a detectably-labeled polypeptide comprising at least a portion of a neurotrophin receptor selected from human TrkA, human TrkB and human TrkC, which is capable of binding said neurotrophin, and
- (b) testing for the presence of said detectably-labeled polypeptide in complex with said neurotrophin, and
- (c) diagnosing said pathological condition.

18. (New) The method of claim 17, wherein said polypeptide comprising at least a portion of a neurotrophin receptor capable of binding said neurotrophin is an immunoadhesin.